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WHAT IS CLAIMED IS:

- 1. An automated imaging system comprising:
- an illumination source;
- a phosphorescent imaging target; and
- an optical imaging sensor for receiving luminance information emitted from said phosphorescent imaging target.
 - 2. The automated imaging system of claim 1 further comprising: a processor for analyzing said luminance information.
- 3. The automated imaging system of claim 1 wherein said illumination source moves in relation to said phosphorescent imaging target.
- 4. The automated imaging system of claim 1 wherein said phosphorescent imaging target is movable in relation to said illumination source.
- 5. The automated imaging system of claim 1 wherein said phosphorescent imaging target is affixed to an object.
- 6. The automated imaging system of claim 5 wherein said received luminance information determines a position of said object.
- 7. The automated imaging system of claim 5 wherein said received luminance information determines an alignment of said object with another object.
- 8. The automated imaging system of claim 5 wherein said received luminance information determines a presence of said object.

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- 9. The method of automatically imaging an object comprising the steps of: radiating photonic illumination onto said object; scanning said object;
- re-radiating a portion of said radiated photonic illumination from a phosphorescent target on said object; and

receiving said re-radiated photonic illumination.

- 10. The method of claim 9 wherein said scanning step comprises the step of: sweeping said photonic illumination across said object.
- 11. The method of claim 9 wherein said scanning step comprises the step of: moving said object underneath said radiated photonic illumination.
- 12. The method of claim 9 wherein said receiving step comprises the steps of: optically sensing said re-radiated photonic illumination.
- 13. The method of claim 9 further comprising the step of:

 determining a positional orientation responsive to said received re-radiated photonic illumination.
- 14. The method of claim 13 further comprising the step of: aligning said object with another object responsive to said determined positional orientation.
- 15. The method of claim 9 further comprising the step of: incrementing a counter for detecting a number said objects responsive to said received re-radiated photonic illumination.

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16. An imaging system for optoelectrically detecting a presence of an object, said imaging system comprising:

means for illuminating a region of space;
means for providing a phosphorescent indicium on said object; and
means for detecting light energy re-radiated from said phosphorescent mark.

- 17. The imaging system of claim 16 further comprising: means for processing presence information responsive to said detected light energy.
- 18. The imaging system of claim 17 further comprising: means for determining a positional orientation responsive to said processed presence information.
- 19. The imaging system of claim 18 further comprising: means for aligning said object with another object responsive to said determined positional orientation.